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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,651	08/30/2000	Michael Lassner	MTC 6718	1981

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EXAMINER	
KALLIS, RUSSELL	
ART UNIT	**PAPER NUMBER**
1638	

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/651,651	LASSNER ET AL.	
	Examiner	Art Unit	
	Russell Kallis	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-120* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-120* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-2, 5-19, 26, 28, 30, 32, 34, 36, 38, 40-50, 76-78, 82, 84, 86, 88, 107-108, 111, 113, 115 and 117 drawn to an isolated nucleic acid sequence encoding a plant lecithin:cholesterol acyltransferase-like polypeptide, recombinant constructs, host cells, plants having modified sterol content or oil composition and seeds comprising said DNA, classified in class 800, subclass 281 for example.

II. Claims 3-4, 6-7, 20-25, 27, 29, 31, 33, 35, 37, 39, 40-50, 79-81, 83, 85, 87, 89, 109-110, 112, 114, 116 and 118 drawn to an isolated nucleic acid sequence encoding an acyl CoA:cholesterol acyltransferase-like polypeptide, recombinant constructs, host cells, plants having modified sterol content or oil composition , and seeds comprising said DNA, classified in class 800, subclass 298 for example.

III. Claim 51-55, drawn to a purified polypeptide, an antibody, and a method of producing a polypeptide, classified in class 435, subclass 72.1 for example.

IV. Claims 56-57, 60, 62, 64, 66, 68, 70, 72, 74, 93-94, 97, 99, 101, 103 and 105 drawn to a method of modifying the sterol content or oil production in a host cell by transformation with a polynucleotide encoding a lecithin:cholesterol

acyltransferase-like polypeptide and culturing said cells under conditions that permit expression, classified in class 435, subclass 255.21 for example.

V. Claims 58-59, 61, 63, 65, 67, 79, 71, 73, 75, 95-96, 98, 100, 102, 104 and 106 drawn to a method of modifying the sterol content or oil production in a host cell by transformation with a polynucleotide encoding an acyl CoA:cholesterol acyltransferase-like polypeptide and culturing said cells under conditions that permit expression, classified in class 435, subclass 257.2 for example.

VI. Claims 90-92, drawn to a plant oil having a modified sterol composition and method thereof, classified in class 435, subclass 601 for example.

VII. Claims 119-120, drawn to food products comprising a plant oil having a modified sterol composition, classified in class 435, subclass 651 for example.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of Groups I and II are drawn to polynucleotides that have different structure, substrate specificity and products.

Inventions I-II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of Group I and Group II have a different structure and function than the polypeptides,

antibodies, and method of making a polypeptide of Group III. A search for the polypeptides of Group III would not necessarily reveal information about the polynucleotides encoding them

Inventions I and IV-V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the invention of Group I can be used in hybridization methods to isolate nucleotide sequences encoding other plant acyltransferases that is a materially different process of that of Group IV.

Inventions II and IV-V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the invention of Group II can be used in hybridization methods to isolate nucleotide sequences encoding other plant acyltransferases that is a materially different process of that of Group IV.

Inventions III and IV-V are unrelated. The method of Group IV does not require the protein of Group III as starting material.

Inventions IV and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are the method of modifying oil or sterol composition in transformed host cells using

a polynucleotide encdoding a lecithin:cholesterol acyltransferase-like polypeptide of Group IV or the method of modifying oil or sterol composition in transformed host cells using a polynucleotide encoding an acyl CoA:cholesterol acyltransferase-like polypeptide of Group V. The starting materials for the methods are different transformable DNA, producing different oil or sterol compositions.

Inventions VI and VII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are the modified plant oil of Group VI and the food compositions comprising the modified plant oil of Group VII. The modified plant oil of Group VI has a different structure and composition than the food composition comprising the modified oil of Group VII. A search for modified plant oils would not necessarily reveal information about food composition.

Inventions I-III and VI-VII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are the DNA constructs, host cells, transgenic plants of Groups I-II and the polypeptides, antibodies and method of making a polypeptide of Group III; and the modified oil and food composition comprising the modified oil of Group VI and VII. The inventions of Groups I-III are different from the inventions of Groups VI and VII because they are not disclosed as capable of use together.

Inventions IV-V and VI-VII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation,

different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are the method of modifying oil or sterol content in host cells of Groups IV-V. The inventions of Groups IV-V are different from the inventions of Groups VI and VII because they are not disclosed as capable of use together.

If Applicant elects the invention of Group II, Applicant is required to elect a single nucleic acid sequence of SEQ ID NO: 2, 4, 6, 8, 10-29, 33, 42-51, 73 or 75. If Applicant elects the invention of Group III, Applicant is required to elect a single amino acid sequence of SEQ ID NO: 3, 5, 7, 9, 74 or 76. If Applicant elects the invention of Group IV, Applicant is required to elect a single nucleic acid sequence of SEQ ID NO: 2, 4, 6, 8, 10, 11, 73 or 75. If Applicant elects the invention of Group V, Applicant is required to elect a single nucleic acid sequence of SEQ ID NO: 33 or 42. This requirement is not to be construed as a requirement for an election of species, since each of the nucleic acid sequences or amino acid sequences recited in alternative form is not a member of a single structurally and functionally related genus, but rather constitutes an independent and patentably distinct invention. Separate searches and considerations would be required for examination of each of the nucleic acid sequences.

Because the inventions are distinct for the reasons given above and have required a separate status in the art as shown by their different classifications, recognized divergent subject matter, and because the search required for one of the groups is not required for another restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kallis whose telephone number is (571) 272-0798. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Russell Kallis Ph.D.
June 3, 2004

ASHWIN D. MEHTA, PH.D
PATENT EXAMINER